CITATION ANALYSIS REPORT

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Citations to Dark et al. (2011) in the Ballona Wetlands Restoration Project EIR Document Set

Source work under review:

Dark, S., E. D. Stein, D. Bram, J. Osuna, J. Monteferante, T. Longcore, R. Grossinger, and E. Beller. 2011. Historical Ecology of the Ballona Creek Watershed. Southern California Coastal Water Research Project, Technical Report #671.

Prepared for:

Tom McMahon

Date:

April 21, 2026

Purpose:

To document all places in the Ballona Wetlands Restoration Project EIR document set where Dark et al. (2011) — SCCWRP Technical Report #671 — is cited, in support of evaluating the scope of impact from the **Corrigenda issued April 20, 2026.**

1. Executive Summary

This report catalogs every citation to Dark et al. (2011) — Historical Ecology of the Ballona Creek Watershed, Southern California Coastal Water Research Project Technical Report #671 — located in the complete document set of the Ballona Wetlands Restoration Project Environmental Impact Report (Draft EIS/EIR, September 2017; Final EIR Volumes 1–7, December 2019). The document set comprises 24 searchable PDFs totaling approximately 14,800 pages across the main Draft and Final EIR volumes and all appendices (A through J).

Citation totals

Citation Location Type	Count
Body text (inline parenthetical + narrative)	50
Footnotes	12
Figure captions	1
Reference list entries	12
TOTAL (all direct citations to Dark et al. 2011)	**75**

Breaking out body-text citations from reference-list entries: of the 75 total direct citations to Dark et al. (2011), 63 are body-text-class citations (parenthetical inline, narrative, footnote, or figure caption) — that is, each represents a specific substantive claim, sentence, or illustration supported by Dark et al. (2011). The remaining 12 are reference-list (bibliography) entries.

Grand total across the entire EIR document set: 75 direct citations to Dark et al. (2011), distributed across 9 of the 24 searched PDFs. In addition, 16 co-authorship-only entries (where "S. Dark" appears as a co-author in related publications such as Grossinger et al. 2011, Stein et al. 2007, Stein et al. 2010, Beller et al. 2011, or Beller et al. 2014) were identified and cataloged separately; these do not cite SCCWRP #671 itself and are not counted in the 75 totals above.

Statement of significance

Each of the 63 body-text citations represents a discrete point at which the EIR's factual basis relies on Dark et al. (2011). Because SCCWRP has now issued a Corrigenda (dated April 20, 2026) correcting numerous factual errors in that report — including, among other items, claims regarding a "series of earthquakes before 1825," a "period of several years of heavy rains" around 1825, and the incorrect identification of the agency responsible for the U.S. Coast Survey T-sheets — each of these 63 EIR passages must be re-examined to determine whether the underlying analysis or conclusion remains supportable in light of the corrected facts.

Particular attention is warranted in the following high-density locations:

- Draft EIR Appendix B3 (Conceptual Habitat Restoration and Adaptive Management Plan), Section 2.2.2 Historical Ecology, pp. B3-19 to B3-21 — seven body-text citations supporting historical habitat composition, acreage, and vegetation dominance, all of which feed into target-habitat selection at Section 3.1 and the native plant palette at Section 3.2.3.

- Draft EIS/EIR main volume, Section 2.3.7 (Alternative 11: 19th Century Wetlands), p. 358 — two body-text citations, one of which attributes the pre-1825 routing of the Los Angeles River into the Ballona Lagoon to "a period of several years of heavy rains and a series of earthquakes." This is one of the specific narratives withdrawn in the April 20, 2026 Corrigenda.
- Final EIR Volume 1, Section 2.2.3.3 (Range of Alternatives – Historical Context), p. 2-38 — footnote 16 cites Dark et al. (2011) "including Figure 20 and Table 6" to justify the percentage breakdown of dominant historical wetland types (alkali meadow 35%, valley freshwater marsh 10%, brackish-to-salt marsh 9%, alkali flats 8%).
- Final EIR Volume 5, Chapter 2, p. 2-3512 — CDFW's own response text cites Dark et al. (2011) (specifically, the citations carried forward from Footnote 1 of the Draft EIS/EIR Key Definitions and from Draft EIS/EIR Sections ES.1 and 1.2.2) as the basis for documented historic saltwater intrusion at Ballona.

2. Methodology

2.1 Documents searched

All currently posted PDFs of the Ballona Wetlands Restoration Project EIR document set hosted on the California Department of Fish and Wildlife (CDFW) Natural Resources Management document server (nrm.dfg.ca.gov) were downloaded and searched. The 24 PDFs comprising the EIR document set are listed below.

Document	CDFW Document ID	PDF Pages
Draft EIS/EIR (main)	149710	1,243
Draft EIR Appendix A – TOC	149721	2
Draft EIR Appendix A – Part 1 (Scoping Report)	149722	1,143
Draft EIR Appendix A – Part 2 (Scoping Report cont.)	149723	1,117
Draft EIR Appendix B – Part 1 (Prelim. Design Report)	(Draft EIR Doc set)	1,028
Draft EIR Appendix B – Part 2 (Prelim. Design Report cont.)	(Draft EIR Doc set)	474
Draft EIR Appendix B – Part 3 (Prelim. Design Report cont.)	(Draft EIR Doc set)	38
Draft EIR Appendix B – Part 4 (B2–B10)	(Draft EIR Doc set)	506
Draft EIR Appendix C (Air Quality & GHG)	149714	114
Draft EIR Appendix D (Biological Resources)	149715	358
Draft EIR Appendix E – Part 1 (Geotechnical Investigation)	149724	452
Draft EIR Appendix E – Part 2 (Geotechnical Lab Testing)	149725	516
Draft EIR Appendix F (Hydrology & Water Quality)	149716	566
Draft EIR Appendix G (Noise Data)	149717	101
Draft EIR Appendix H (Traffic Study)	149718	428
Draft EIR Appendix I (Census Data)	149719	8
Draft EIR Appendix J (Acronyms & Glossary)	149720	22
Final EIR Volume 1	175290	632
Final EIR Volume 2	175295	850
Final EIR Volume 3	175296	854
Final EIR Volume 4	175297	850
Final EIR Volume 5	175298	762
Final EIR Volume 6	175299	916
Final EIR Volume 7 (Appendices)	175300	58

2.2 Search terms

Every PDF was searched for the following terms using case-insensitive matching:

- Dark (the surname, as a standalone word)
- Dark et al. / Dark et al / Dark et. al / Dark, et al. / Dark et. al.
- Dark and (to capture two-author variants such as "Dark and others")

- Dark, S. / Dark, Shawna / Shawna Dark / Shana Dark / S. Dark / S. J. Dark
- Historical Ecology of the Ballona Creek Watershed (the report title)
- SCCWRP #671 / Technical Report #671 / Technical Report No. 671
- 2011 (cross-check on date-keyed citations, where other markers were ambiguous)

Text extraction was performed via multiple independent methods (pdftotext/Poppler, PyMuPDF/fitz, pdfplumber, and LLM-assisted fetch extraction). Image-only pages were processed through Tesseract OCR. Every hit was manually reviewed in its surrounding page context to determine whether it represented a citation or an unrelated use of the word "dark" (e.g., "dark-colored mud," "Dark-eyed Junco," "dark-sky lighting," "dark blue contour line"). Non-citation occurrences were excluded.

2.3 Classification scheme

Each confirmed citation was classified into one of the following location-type categories:

- Body text — an inline parenthetical citation (e.g., "(Dark et al. 2011)") or narrative citation (e.g., "as summarized by Dark et al. (2011)") appearing within a paragraph of main narrative.
- Footnote — a citation appearing in a page-foot note or endnote, whether a full bibliographic entry or a short-form author-date reference.
- Figure caption — a citation appearing in the caption text of a figure or map, typically crediting the source of reproduced content.
- Reference list — a formal bibliographic entry appearing in a dedicated References, Literature Cited, or Bibliography section.
- Table — a citation appearing within a table cell. (None were found in the EIR document set.)

Where a single citation in a quoted passage was reproduced from another EIR component (e.g., a Final-EIR response quoting Draft-EIR Appendix B3), each appearance is counted once at the location where it was found.

2.4 Scope note: "Dark et al. 2011" vs. co-authorship appearances

For purposes of this report, "direct citations to Dark et al. (2011)" are references to SCCWRP Technical Report #671 specifically. Shawna Dark is also a named co-author on several related works — including Grossinger et al. 2011 (SCCWRP Technical Report #589 / SFEI Contribution #586, the companion T-sheet atlas), Stein et al. 2007 (SCCWRP #499), Stein et al. 2010 (Wetlands 30:589–601), Beller et al. 2011, Beller et al. 2014, and Stein et al. 2014. Occurrences of Dark's name within references to those other works are cataloged separately in the supporting workspace files but are not counted in the 75-citation total, which is reserved for citations of SCCWRP #671 itself.

3. Document-by-Document Breakdown

The following table summarizes, for each of the 24 PDFs searched, the number of body-text-class citations (inline parenthetical, narrative, footnote, or figure caption) and reference-list entries citing Dark et al. (2011), plus a brief summary of where those citations cluster and any notable patterns.

Document (pages)	Document ID	Body-text + Fn + Fig. Caption Citations	Reference List Entries	Summary / Notable Patterns
Draft EIS/EIR (main; 1,243 pp.)	DocID 149710	8	3	Cited in Key Definitions fn, Executive Summary, Introduction, Chapters 2 (Alternatives) and 3 (Biological Resources). Section 2.3.7 cites the report for pre-1825 LA River flow path and the "series of earthquakes" / "period of several years of heavy rains" narrative.
Draft EIR Appendix A, Part 1 (Scoping Report; 1,143 pp.)	DocID 149722	4	1	Citations within LA Audubon (Apr 2012) and T. Longcore (Oct 2012) scoping letters. Page A-285 has three body-text citations in one letter.
Draft EIR Appendix A, Part 2 (Scoping Report cont.; 1,117 pp.)	DocID 149723	3	1	Citations within Margot Griswold and David Jacobs (UCLA) technical scoping letters.
Draft EIR Appendix B, Part 4 (B2–B10; 506 pp.)	DocID unlisted (final EIR Doc set)	12	2	All in Appendix B3 (CHRAMP Section 2.2.2 Historical Ecology — 7 citations on pp. B3-19 to B3-21) plus Section 3.1 and 3.2.3; Appendix B5 O&M Plan also cites.
Draft EIR Appendix D (Biological Resources; 358 pp.)	DocID 149715	1	0	Single body-text citation in Sub-appendix D17 (Biological Assessment), Section 4.0 Environmental Baseline.
Draft EIR Appendix F (Hydrology & Water Quality; 566 pp.)	DocID 149716	4	2	Sub-appendix F1 (Sediment Dynamics) — 1 body + 1 ref; Sub-appendix F7 (Hydrology & Hydraulics) — 3 body + 1 ref (Section 6.1 Historic Geomorphology).
Draft EIR Appendix C (Air Quality; 114 pp.)	DocID 149714	0	0	Numerical tables only; no references section.
Draft EIR Appendix E (Geotechnical; 968 pp. total)	DocID 149724 / 149725	0	0	Engineering content; no citations to historical ecology literature.
Draft EIR Appendix G (Noise Data; 101 pp.)	DocID 149717	0	0	Raw noise data; no references section.
Draft EIR Appendix H (Traffic Study; 428 pp.)	DocID 149718	0	0	Traffic engineering; no references section.

Document (pages)	Document ID	Body-text + Fn + Fig. Caption Citations	Reference List Entries	Summary / Notable Patterns
Draft EIR Appendix I (Census Data; 8 pp.)	DocID 149719	0	0	Demographic tables only.
Draft EIR Appendix J (Acronyms & Glossary; 22 pp.)	DocID 149720	0	0	Definitional content; no bibliography.
Final EIR Volume 1 (Ch. 2 Responses; 632 pp.)	DocID 175290	7	0	All 7 citations are footnotes in Chapter 2 General Responses and Individual Responses. Footnote 16 (p. 2-38) cites specific Figure 20 and Table 6 of the report.
Final EIR Volume 2 (Ch. 2 Responses cont.; 850 pp.)	DocID 175295	2	1	All occurrences in a single comment letter (O4, USFWS / Dr. D. Swenson) including its Literature Cited section.
Final EIR Volume 3 (Comment Letter O11 Pt. 2; 854 pp.)	DocID 175296	0	0	No direct citations to Dark et al. 2011.
Final EIR Volume 4 (Comment Letter O11 Pt. 3 + CDFW responses; 850 pp.)	DocID 175297	0	0	No direct citations to SCCWRP #671. (Eight co-authorship references to related papers appear in the literature cited of an attached SCCWRP #619a paper.)
Final EIR Volume 5 (Ch. 2 Responses cont.; 762 pp.)	DocID 175298	13	1	Highest-volume source in the Final EIR. Includes CDFW's own response citation for historic saltwater intrusion (p. 2-3512) and a reproduced figure caption from the report (p. 2-3203). Seven citations in Comment Letter O15 alone.
Final EIR Volume 6 (Ch. 2 Responses cont.; 916 pp.)	DocID 175299	9	1	Citations concentrated in Comment Letters I27 (Longcore/USC), I46, I70, and I83. Substantial block quotations from the report.
Final EIR Volume 7 (Appendices; 58 pp.)	DocID 175300	0	0	Administrative appendices only (notices, commenter lists, revised figures).

Notable patterns

- The densest single location is Appendix B3, Section 2.2.2 "Historical Ecology" (pp. B3-19 to B3-21, CHRAMP), where Dark et al. (2011) is cited 7 times in approximately 3 pages of continuous text — effectively the EIR's primary synthesis of the historical ecology basis for the restoration design.
- Final EIR Volume 1 contains 7 citations, all of them footnotes in Chapter 2 Responses to Comments. Footnote 16 (p. 2-38) is the only citation in the entire document set that references specific figures and tables of Dark et al. (2011) — namely "Figure 20 and Table 6" — which themselves document the percentage breakdown of dominant historical wetland types.

- The Final EIR volumes containing commenter submissions (Volumes 5 and 6) are citation-dense because commenters — including Travis Longcore (USC) and the authoring group for Comment Letter O15 — used Dark et al. (2011) extensively to argue that the project should be characterized as wetlands "creation" rather than "restoration," and to challenge the proposed full-tidal design as inconsistent with historical conditions.
- CDFW, in its own formal responses (not merely comments submitted by others), cited Dark et al. (2011) at least three times in the Final EIR: Volume 1 fn. 10 and fn. 31; and Volume 5 p. 2-3512 (historic saltwater intrusion at Ballona).
- No citations appear in Appendices C, E (Parts 1 & 2), G, H, I, or J — consistent with the technical, non-ecological subject matter of those appendices (air quality, geotechnical, noise, traffic, census demographics, glossary).
- Final EIR Volumes 3 and 4 — which primarily contain the lengthy Comment Letter O11 (Grassroots Coalition) and its attachments — contain no direct citations to SCCWRP #671. Dark does appear as co-author in the literature-cited sections of an attached SCCWRP #619a paper, but those are references to other works.

4. Thematic Analysis

To assess the downstream effect of the April 20, 2026 Corrigenda, citations have been grouped by the factual claim they are used to support. Five groupings are used. Each citation is assigned to one primary theme based on the immediate sentence and surrounding passage.

Theme / Supported Claim	Citation Count	Example Locations	What the Citation Supports
Historical extent / acreage of Ballona Wetlands	8	Draft EIR p. 26, p. 93, p. 505; Draft EIR App. D17-4; Draft EIR App. B3-19 (two citations on this theme, including the 4,288-acre figure); Final EIR Vol. 5 p. 2-3378 (Sierra Club); Final EIR Vol. 6 p. 2-4325.	Supports the "2,100+ acres / Playa del Rey to Venice to Baldwin Hills" narrative, and the 4,288-acre Ballona Lagoon figure cited in Appendix B3 §2.2.2.
Historical habitat types / vegetation communities	19	Draft EIR p. 355, p. 358, p. 507; Draft EIR App. B3-20 (×4 including dominant-habitat list), B3-21 (×2), B3-35 (target habitats), B3-47 (plant palette); Draft EIR App. B5-21 (plant palette); Final EIR Vol. 1 fn. 16 (Figure 20 + Table 6 – percentage habitat breakdown), fn. 31; Final EIR Vol. 5 p. 2-3203 (alkali meadow in Area C), p. 2-3203 Fig. 1 caption, p. 2-3266 (quoting App. B3); Final EIR Vol. 6 p. 2-4389 (I83-3).	Supports the Draft EIR/CHRAMP habitat inventory (alkali meadow 35%, valley freshwater marsh 10%, brackish-salt marsh 9%, alkali flats 8%) and restoration-target plant palette.
Historical hydrology / geomorphology	21	Draft EIR p. 358 (pre-1825 LA River flow; earthquakes; heavy rains); Draft EIR App. F1-4 (freshwater springs post-avulsion); Draft EIR App. F7-75 (×3 – 1884 historic map; 1850 historic ecology; seasonal closure of Ballona mouth); Draft EIR App. A – Jacobs letter A-2209, A-2210 (historical lake-like feature); Final EIR Vol. 1 fn. 10, fn. 11, fn. 47; Final EIR Vol. 2 O4 items 2 & 3; Final EIR Vol. 5 pp. 2-3201 (×3), 2-3202, 2-3209, 2-3512 (CDFW on saltwater intrusion); Final EIR Vol. 6 pp. 2-4002 (×2), 2-4233, 2-4235.	Supports claims about seasonal ocean closure, tidal regime, freshwater dominance, the 2,000-year absence of full estuarine conditions, and the artificial nature of the present Ballona Creek channel.
Restoration alternatives basis / justification	11	Draft EIR p. 23 (Ballona Wetlands definition), p. 507 (primary source list); Draft EIR App. B3-13 (CHRAMP introduction), B3-35 (target habitat composition), B3-47 (plant palette); Draft EIR App. B5-21 (O&M plant palette); Draft EIR App. A p. A-256 (Audubon on salt panne), A-285 (×2 Longcore "creation vs. restoration"), A-1962 (Griswold on tidal connection); Final EIR Vol. 5 p. 2-3164 (×2 O13-12).	Supports the rationale for the range of alternatives analysis and specific design decisions (tidal vs. muted; plant palette; target habitat percentages).
Other (narrative / bibliographic references, block quotes)	16	Draft EIR p. 84, p. 367, p. 719 (reference list entries); Draft EIR App. B3-110, B5-37 (reference list entries); Draft EIR App. F1-63, F7-96 (reference list entries); Draft EIR App. A A-287, A-2216 (reference list entries); Final EIR Vol. 2 p. 2-999 (reference list entry); Final EIR Vol. 5 pp. 2-3201 (intro to block quote), 2-3246 (reference list entry), 2-3581 (quoting App. B); Final EIR Vol. 6 pp. 2-4002 (intro to block quote), 2-4004 (reference list entry), 2-4389 (×2 narrative refs to report), 2-4395.	Standalone bibliographic listings and narrative-form references to the report as a document; includes introductions to block-quoted passages from the report.

Theme-specific observations

Historical extent / acreage. The EIR repeatedly uses the "more than 2,100 acres" and "Playa del Rey to Venice to Baldwin Hills" framing, each time citing Dark et al. (2011). Appendix B3 §2.2.2 (p. B3-19) additionally cites the report for the larger 4,288-acre (1,735-hectare) estimate of the historical Ballona Lagoon extent, contrasting it with the 2,120-acre figure from PWA et al. (2006).

Historical habitat types / vegetation. Final EIR Volume 1 footnote 16 (p. 2-38) is the most specific dependency: it cites "Dark et al., 2011, including Figure 20 and Table 6" for the 35%/10%/9%/8% (alkali meadow / valley freshwater marsh / brackish-to-salt marsh / alkali flats) breakdown. Appendix B3 §2.2.2 (p. B3-20) cites Dark et al. (2011) as the source for the ordered list of dominant historical vegetation types (alkali meadows, tidal marsh, wet meadows, salt flats, willow thickets, beach and dune habitats, open water, and perennial freshwater ponds).

Historical hydrology / geomorphology. This is the theme most directly implicated by the Corrigenda. Draft EIR p. 358 attributes the pre-1825 Los Angeles River's flow into Ballona Lagoon, and its subsequent migration to San Pedro, to "a period of several years of heavy rains and a series of earthquakes" — with Dark et al. (2011) cited as the authority. The April 20, 2026 Corrigenda withdraws precisely this narrative (both the "series of earthquakes before 1825" and the "three years of heavy rains around 1825" claims).

Restoration alternatives basis / justification. Nearly every time the Draft EIR/Final EIR articulates the factual grounding for its range of alternatives, for its target habitat composition, for its native plant palette, or for the "Ballona Wetlands" definition itself, Dark et al. (2011) is one of the cited authorities. This places the report at or near the foundation of the restoration-design logic.

5. Implications for EIR Review

The Southern California Coastal Water Research Project issued a Corrigenda to Dark et al. (2011) on April 20, 2026. The Corrigenda withdraws several specific factual claims in the 2011 report, including but not limited to:

- The assertion of a "series of earthquakes" occurring before 1825 in connection with the Los Angeles River's pre-1825 course.
- The assertion of "three years of heavy rains around 1825" as a contributing cause of the 1825 avulsion of the Los Angeles River away from Ballona Lagoon to its present outlet near San Pedro.
- The incorrect identification of the agency responsible for the U.S. Coast Survey T-sheets used as a primary data source.
- Additional factual errors of the types catalogued in the Corrigenda document.

Because 63 body-text-class citations in the Ballona Wetlands Restoration Project EIR document set rely on Dark et al. (2011) as a factual authority, and because at least one of those citations (Draft EIS/EIR p. 358) repeats the specific earthquake-and-heavy-rains narrative now withdrawn, each such citation represents a point at which the EIR's factual basis may require re-examination.

This report takes no position on whether, for any given citation, the re-examination will or will not alter the EIR's analytical conclusions. Its purpose is to establish the full scope of potential impact — that is, the set of specific EIR passages that are factually linked to Dark et al. (2011) and therefore potentially affected by the Corrigenda.

The master citation table in Section 6, and the document-by-document and thematic tables in Sections 3 and 4, together provide the information necessary for a systematic reviewer (at CDFW, at a responsible agency, or in an administrative proceeding) to work through the 75 discrete citation points and determine, for each, whether the cited passage in Dark et al. (2011) is among those corrected by the Corrigenda and whether the EIR's use of that passage remains valid on the corrected record.

6. Master Citation Table

The following table lists every confirmed direct citation to Dark et al. (2011) in the Ballona Wetlands Restoration Project EIR document set, in document-then-page order. All 75 citations are included. Page references give both the document-internal page number and, where different, the PDF page number from the as-posted CDFW PDF.

Document	Vol/Part	Page (doc / PDF)	Section / Chapter	Citation Form (as it appears)	Location Type	Context / Subject Matter
Draft EIS/EIR (main)	Key Defs	p. 23	KEY DEFINITIONS AND ACRONYMS – fn. 1	Dark, Shawna; Stein, Eric D., et al., 2011. Historical Ecology of the Ballona Creek Watershed. SCCWRP Tech. Report #671.	Footnote	"Ballona Wetlands" definition – 2,100+ acres, Playa del Rey to Venice to Baldwin Hills.
Draft EIS/EIR (main)	ES	p. 26	ES.1 Background and Project Overview	(Dark et al. 2011; Grossinger et al. 2011)	Body text	Historical extent of wetlands ecosystem (Playa del Rey to Venice to Baldwin Hills).
Draft EIS/EIR (main)	ES	p. 84	ES.9 References	Dark et al., 2011. Historical Ecology of the Ballona Creek Watershed...	Reference list	Full bibliographic entry in Executive Summary references.
Draft EIS/EIR (main)	Ch. 1	p. 93	1. Introduction	(Dark et al, 2011; LACDPW, 2013)	Body text	Wetlands once spanned >2,100 acres; geographic extent.
Draft EIS/EIR (main)	Ch. 2	p. 355	2.3.6 Alt. 10: Manipulated Wetlands	(Dark et al. 2011)	Body text	Historic late-1800s habitat: freshwater, brackish, saltmarsh 1.5 mi. inland.
Draft EIS/EIR (main)	Ch. 2	p. 358	2.3.7 Alt. 11: 19th Century Wetlands – Description	(Dark et. al 2011)	Body text	Basis for 19th-century wetlands alternative: 1850–1890 configuration.
Draft EIS/EIR (main)	Ch. 2	p. 358	2.3.7 Alt. 11: 19th Century Wetlands – Description	(Dark et al. 2011)	Body text	Pre-1825 LA River flowed through Ballona watershed; series of earthquakes & heavy rains preceded 1825 avulsion.
Draft EIS/EIR (main)	Ch. 2	p. 367	2. Description of Alternatives – References	Dark, Shawna; Stein, Eric D., et al., 2011. ...	Reference list	Full bibliographic entry in Chapter 2 references.
Draft EIS/EIR (main)	Ch. 3	p. 505	3.4.2 Affected Environment	(Dark et al. 2011; LACDPW 2013)	Body text	Historical wetlands spanned >2,100 acres; geographic extent.
Draft EIS/EIR (main)	Ch. 3	p. 507	3.4 Biological Resources – Primary sources list	(Dark et al. 2011)	Body text (source list)	Listed as 3rd of 14 primary sources for Section 3.4 Biological Resources.

Document	Vol/Part	Page (doc / PDF)	Section / Chapter	Citation Form (as it appears)	Location Type	Context / Subject Matter
Draft EIS/EIR (main)	Ch. 3	p. 719	3.4.8 References	Dark, Shawna, Eric D. Stein, Danielle Bram, Joel Osuna, Joseph Monteferante, Travis Longcore, Robin Grossinger, and Erin Beller. 2011...	Reference list	Full bibliographic entry (complete author list) in Biological Resources references.
Draft EIR Appendix A (Scoping Report)	Part 1	p. A-256 / PDF 257	LA Audubon Society scoping letter (Apr 2012) – fn. 2	Dark, S., E.D. Stein, D. Bram, J. Osuna, J. Monteferante, T. Longcore, R. Grossinger, and E. Beller. 2011...	Footnote	Supports claim that the salt panne has been a stable landscape feature for 120+ years.
Draft EIR Appendix A (Scoping Report)	Part 1	p. A-285 / PDF 286	T. Longcore (USC) scoping letter (Oct 22, 2012)	(Dark et al. 2011; Jacobs et al. 2011; Stein et al. 2010; Stein et al. 2007)	Body text	Commenter identifies his own research portfolio on coastal estuaries & riparian systems.
Draft EIR Appendix A (Scoping Report)	Part 1	p. A-285 / PDF 286	T. Longcore scoping letter – "creation vs. restoration"	(Dark et al. 2011; Palacios-Fest et al. 2006)	Body text	Supports claim that NOP conditions have not been present for >2,000 years.
Draft EIR Appendix A (Scoping Report)	Part 1	p. A-285 / PDF 286	T. Longcore scoping letter – intro to block quote	summarized by Dark et al. (2011):	Body text (narrative)	Introduces block-quoted passage on historical habitat composition of Ballona Lagoon.
Draft EIR Appendix A (Scoping Report)	Part 1	p. A-287 / PDF 288	Longcore letter – Literature Cited	Dark, S., E.D. Stein, D. Bram... 2011.	Reference list	Full bibliographic entry.
Draft EIR Appendix A (Scoping Report)	Part 2	p. A-1962 / PDF 820	M. Griswold scoping letter (Oct 23, 2012)	(Dark et al. 2011)	Body text	Argues proposed daily tidal connection is inconsistent with historical ecology.
Draft EIR Appendix A (Scoping Report)	Part 2	p. A-2209 / PDF 1067	D. Jacobs (UCLA) technical comment letter – §6.1	(Dark et al. 2011)	Body text	Describes historical frontal lagoon: typically closed to sea, often referred to as a lake.
Draft EIR Appendix A (Scoping Report)	Part 2	p. A-2210 / PDF 1068	D. Jacobs technical comment letter	(e.g. Dark et al. 2011)	Body text	Supports claim about historical marsh and willow thickets upstream in watershed.
Draft EIR Appendix A (Scoping Report)	Part 2	p. A-2216 / PDF 1074	Jacobs letter – References	Dark, S., E.D. Stein, D. Bram... 2011.	Reference list	Full bibliographic entry.
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-13 / PDF 53	1.0 Introduction	(e.g., Dark et al. 2011)	Body text	Historical ecology largely inferred from historical accounts of LA coast.
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-19 / PDF 59	2.2.2 Historical Ecology	(Dark et al. 2011)	Body text	Historical extent of Ballona Lagoon estimated at 4,288 acres (vs. 2,120 per PWA 2006).

Document	Vol/Part	Page (doc / PDF)	Section / Chapter	Citation Form (as it appears)	Location Type	Context / Subject Matter
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-19 / PDF 59	2.2.2 Historical Ecology	(Dark et al. 2011)	Body text	Ballona Creek watershed spanned from Santa Monica Mountains to the coast.
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-20 / PDF 60	2.2.2 Historical Ecology	(Dark et al. 2011; Ambrose and Bear 2012)	Body text	Transition from LA River to Ballona Creek watershed as hydrologic regime shifted.
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-20 / PDF 60	2.2.2 Historical Ecology	(Dark et al. 2011; PWA et al. 2006)	Body text	Flood control / commercial development effects through early 2000s.
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-20 / PDF 60	2.2.2 Historical Ecology	Dark et al. (2011)	Body text	Historical vegetation dominance 1850–1890: alkali meadows, tidal marsh, wet meadows, salt flats, etc.
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-20 / PDF 60	2.2.2 Historical Ecology	(Dark et al. 2011)	Body text	Brackish/freshwater/dune/salt-marsh species historically present.
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-21 / PDF 61	2.2.2 Historical Ecology	Dark et al. (2011)	Body text	Methodology discussion: historical maps, photos, herbaria, bird records.
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-21 / PDF 61	2.2.2 Historical Ecology	Dark et al. (2011)	Body text	Provided historical plant list but did not draw dominant-species conclusions.
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-35 / PDF 75	3.1 Target Habitat Composition	(Ambrose and Bear 2012; Dark et al. 2011; Mattoni and Longcore 1997; Schreiber 1981)	Body text	Basis for restoration target habitat composition at BWER.
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-47 / PDF 87	3.2.3 Vegetation	(...Dark et al. 2011; Sawyer et al. 2009)	Body text	Basis for restoration native plant palette.
Draft EIR Appendix B3 (CHRAMP)	Part 4	p. B3-110 / PDF 150	References (end of Appendix B3)	Dark, S., E.D. Stein, D. Bram... 2011.	Reference list	Full bibliographic entry.
Draft EIR Appendix B5 (O&M Plan)	Part 4	p. B5-21 / PDF 223	1.3 Habitat Restoration → Revegetation	(...Dark et al. 2011; Sawyer et al. 2009)	Body text	Basis for native plant palette in O&M Plan.
Draft EIR Appendix B5 (O&M Plan)	Part 4	p. B5-37 / PDF 239	3.0 References	Dark, S., E.D. Stein, D. Bram... 2011.	Reference list	Full bibliographic entry.
Draft EIR Appendix D17 (Biological Assessment)	App. D	p. D17-4 / PDF 350	4.0 Environmental Baseline	(Dark et al. 2011; LACDPW 2013)	Body text	Historical wetlands spanned >2,100 acres, Playa del Rey to Baldwin Hills.

Document	Vol/Part	Page (doc / PDF)	Section / Chapter	Citation Form (as it appears)	Location Type	Context / Subject Matter
Draft EIR Appendix F1 (Sediment Dynamics)	App. F	p. F1-4 / PDF 6	1. Historic Processes	(Dark et al 2011)	Body text	Freshwater springs sustained the marsh after LA River avulsion of 1825.
Draft EIR Appendix F1 (Sediment Dynamics)	App. F	p. F1-63 / PDF 65	7. References	Dark, S., E. Stein, D. Bram... 2011.	Reference list	Full bibliographic entry.
Draft EIR Appendix F7 (Hydrology & Hydraulics)	App. F	p. F7-75 / PDF 365	6.1 Historic Geomorphology	Dark and others (2011)	Body text	Historic conditions and ecology at time of 1884 historic map described in detail.
Draft EIR Appendix F7 (Hydrology & Hydraulics)	App. F	p. F7-75 / PDF 365	6.1 Historic Geomorphology	(Dark and others 2011)	Body text (fig. ref.)	Figure 28 shows historic ecology of Ballona Creek wetlands and watershed in 1850.
Draft EIR Appendix F7 (Hydrology & Hydraulics)	App. F	p. F7-75 / PDF 365	6.1 Historic Geomorphology	(Dark and others 2011, Jacobs and others 2010)	Body text	Mouth of Ballona constricted and seasonally closed due to longshore sediment transport.
Draft EIR Appendix F7 (Hydrology & Hydraulics)	App. F	p. F7-96 / PDF 386	8. References	Dark, S., E. Stein, D. Bram... 2011.	Reference list	Full bibliographic entry.
Final EIR Volume 1	Ch. 2	p. 2-34 / PDF 46	2.2.2 General Response: Definition of "Restoration" – fn. 10	Dark, Shawna; Stein, Eric D., et al., 2011. Historical Ecology of the Ballona Creek Watershed. SCCWRP Tech. Report #671.	Footnote	Supports basis for Lead Agencies' understanding of historical ecology at Ballona Reserve.
Final EIR Volume 1	Ch. 2	p. 2-37 / PDF 49	2.2.3.3 Range of Alternatives – Historical Context – fn. 11	Dark et al., 2011.	Footnote	Tidal marsh–tidal flat dominant historical system; alkaline/freshwater system ~1.5 mi inland.
Final EIR Volume 1	Ch. 2	p. 2-38 / PDF 50	2.2.3.3 Range of Alternatives – fn. 15	Dark, Shawna; Stein, Eric D., et al., 2011. Historical Ecology of the Ballona Creek Watershed. SCCWRP Tech. Report #671.	Footnote	Historical loss of coastal wetlands: ~14,149 acres of wetlands in Ballona Creek watershed 1850–1890.
Final EIR Volume 1	Ch. 2	p. 2-38 / PDF 50	2.2.3.3 Range of Alternatives – fn. 16	Dark et al., 2011, including Figure 20 and Table 6.	Footnote	Dominant wetland types: alkali meadow (35%), valley freshwater marsh (10%), brackish/salt marsh (9%), alkali flats (8%).
Final EIR Volume 1	Ch. 2	p. 2-71 / PDF 83	2.2.6.2 Freshwater Habitats – fn. 31	Dark et al., 2011.	Footnote	Late-1800s historical freshwater, brackish, and

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						tidally-affected saltmarsh habitats.
Final EIR Volume 1	Ch. 2	p. 2-213 / PDF 225	2.3.3 Responses (AL9-7, groundwater) – fn. 47	Dark et. al, 2011. "Historical Ecology of the Ballona Creek Watershed..." pp. 25–26.	Footnote	Historic tidally influenced saltwater marsh and alkali meadow environment during groundwater pumping era.
Final EIR Volume 1	Ch. 2	p. 2-563 / PDF 575	2.3 Individual Responses (O2-24) – fn. 57	Dark et al., 2011. Historical Ecology of the Ballona Creek Watershed. SCCWRP Tech. Report No. 671.	Footnote	Supports CDFW response on historical wetlands character at Ballona Lagoon.
Final EIR Volume 2	Ch. 2	p. 2-995 / PDF 381	Comment Letter O4 (USFWS/Swenson) – item 2	(Dark et al. 2011)	Body text	Project Purpose 1 critique: high-subtidal habitats not representative of historical conditions.
Final EIR Volume 2	Ch. 2	p. 2-997 / PDF 383	Comment Letter O4 – item 3	(Dark et al. 2011)	Body text	Supports recommendation for intertidal rather than subtidal channels.
Final EIR Volume 2	Ch. 2	p. 2-999 / PDF 385	Comment Letter O4 – Literature Cited	Dark, S., E.D. Stein, D. Bram, J. Osuna, J. Monteferante, T. Longcore, R. Grossinger, and E. Beller. 2011.	Reference list	Full bibliographic entry.
Final EIR Volume 5	Ch. 2	p. 2-3164 / PDF 14	Comment O13-12 – fn. 11	Dark S et al. 2011. Historical Ecology of the Ballona Creek Watershed. SCCWRP Tech. Report no. 671.	Footnote	Supports claim that wetland's tidal gate should be closed during summer months.
Final EIR Volume 5	Ch. 2	p. 2-3164 / PDF 14	Comment O13-12 – fn. 13	Dark S et al. 2011. Historical Ecology of the Ballona Creek Watershed. SCCWRP Tech. Report no. 671.	Footnote	Supports claim re: EPA TMDL for sediment and invasive exotic vegetation.
Final EIR Volume 5	Ch. 2	p. 2-3201 / PDF 51	Comment O15-35	(Dark et al. 2011)	Body text	Evidence that seasonal tidal closure is the natural state for Ballona.
Final EIR Volume 5	Ch. 2	p. 2-3201 / PDF 51	Comment O15-35	(Palacios-Fest et al. 2006, Dark et al. 2011)	Body text	Current-day design conditions absent from system for >2,000 years.
Final EIR Volume 5	Ch. 2	p. 2-3201 / PDF 51	Comment O15-35	summarized by Dark et al. (2011):	Body text (narrative)	Introduces block quote on historical closure of Ballona Lagoon.

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Final EIR Volume 5	Ch. 2	p. 2-3202 / PDF 52	Comment O15-35/36	(Dark et al. 2011)	Body text	Ballona Creek crossing the wetlands is entirely artificial.
Final EIR Volume 5	Ch. 2	p. 2-3203 / PDF 53	Comment O15-37 – Figure 1 caption	(Dark et al. 2011)	Figure caption	Caption for reproduced map of historical habitats of Ballona Wetlands.
Final EIR Volume 5	Ch. 2	p. 2-3203 / PDF 53	Comment O15-38	(Stein et al. 2007, Stein et al. 2010, Dark et al. 2011)	Body text	Area C historically alkali meadow supporting rare plants (Salt Marsh Bird's-Beak).
Final EIR Volume 5	Ch. 2	p. 2-3209 / PDF 59	Comment O15-56/57	(Dark et al. 2011, Jacobs et al. 2011)	Body text	Full tidal estuarine conditions are unnatural at Ballona.
Final EIR Volume 5	Ch. 2	p. 2-3246 / PDF 96	Comment O15 – Literature Cited	Dark, S., E.D. Stein, D. Bram, J. Osuna, J. Monteferante, T. Longcore, R. Grossinger, and E. Beller. 2011.	Reference list	Full bibliographic entry.
Final EIR Volume 5	Ch. 2	p. 2-3266 / PDF 116	CDFW response (quoting App. B3)	(Ambrose and Bear 2012; Dark et al. 2011; Mattoni and Longcore 1997; Schreiber 1981)	Body text (in quoted text)	Quoted App. B3 basis for target habitat selection.
Final EIR Volume 5	Ch. 2	p. 2-3378 / PDF 228	Comment O23-34/36 (Sierra Club)	Dark, et al	Body text (narrative)	Sierra Club notes Dark et al. 2011 as a CDFW-listed reference document.
Final EIR Volume 5	Ch. 2	p. 2-3512 / PDF 362	CDFW Final EIR response	Dark et al., 2011	Body text (narrative)	CDFW cites Dark et al. 2011 for historic saltwater intrusion at Ballona.
Final EIR Volume 5	Ch. 2	p. 2-3581 / PDF 431	Comment I15-49 (quoting App. B)	(e.g., Dark et al. 2011)	Body text (in quoted text)	Appendix B passage acknowledging historical ecology inferred from historical accounts.
Final EIR Volume 6	Ch. 2	p. 2-4002 / PDF 96	Comment I27 (Longcore/USC)	(Dark et al. 2011; Jacobs et al. 2011; Stein et al. 2010; Stein et al. 2007)	Body text	Commenter identifies historical ecology research portfolio.
Final EIR Volume 6	Ch. 2	p. 2-4002 / PDF 96	Comment I27	(Dark et al. 2011; Palacios-Fest et al. 2006)	Body text	NOP ending conditions not present for >2,000 years.
Final EIR Volume 6	Ch. 2	p. 2-4002 / PDF 96	Comment I27 – intro to block quote	summarized by Dark et al. (2011):	Body text (narrative)	Introduces block-quoted passage on historical habitat composition.
Final EIR Volume 6	Ch. 2	p. 2-4004 / PDF 98	Comment I27 – Literature Cited	Dark, S., E.D. Stein, D. Bram, J. Osuna, J. Monteferante, T.	Reference list	Full bibliographic entry.

Document	Vol/Part	Page (doc / PDF)	Section / Chapter	Citation Form (as it appears)	Location Type	Context / Subject Matter
				Longcore, R. Grossinger, and E. Beller. 2011.		
Final EIR Volume 6	Ch. 2	p. 2-4233 / PDF 327	Comment I46-2/3	Longcore, Dark et al	Body text (narrative)	Historical Ecology report states Ballona was primarily a freshwater system historically.
Final EIR Volume 6	Ch. 2	p. 2-4235 / PDF 329	Comment I46-12/16 (quoting App. B)	(e.g., Dark et al, 2011)	Body text (in quoted text)	Quoted App. B passage on historical accounts of LA coast.
Final EIR Volume 6	Ch. 2	p. 2-4325 / PDF 419	Comment I70-3	(Dark et al. 2011; Grossinger et al. 2011)	Body text	Historic geographic extent of Ballona wetlands from Playa del Rey to Venice to Baldwin Hills.
Final EIR Volume 6	Ch. 2	p. 2-4389 / PDF 483	Comment I83-3/5	Shana Dark et al.	Body text (narrative)	Quotes p. 25 of report: low-energy, freshwater-dominated system; full closure in 1880s.
Final EIR Volume 6	Ch. 2	p. 2-4389 / PDF 483	Comment I83-6/7	Shana Dark et al.	Body text (narrative)	Argues report was available to project proponents and should have informed "restoration" definition.
Final EIR Volume 6	Ch. 2	p. 2-4395 / PDF 489	Comment I83-31	Shana Dark et al.	Body text (narrative)	Report concluded freshwater inputs dominated Project area prior to Euro-American modification.

End of Master Citation Table. Total direct citations: 75 (50 body text + 12 footnote + 1 figure caption + 12 reference list).

7. Preparation Note

This report was prepared on April 21, 2026, the day following SCCWRP's issuance of the April 20, 2026 Corrigenda to Dark et al. (2011). It is intended for use in connection with regulatory, legal, and environmental review proceedings concerning the Ballona Wetlands Restoration Project.

The underlying citation-by-citation working records — including exact surrounding text quotations, search methodology logs, and exclusion notes for non-citation occurrences of "dark" (e.g., color descriptors, bird species names, dark-sky lighting references) — are retained in the corresponding workspace files cited-final-v1 through cited-final-v7 (Final EIR Volumes 1–7) and cited-draft-eir plus cited-draft-appendix-a through cited-draft-appendix-g-j (Draft EIS/EIR and its appendices).

All citation counts reported herein were reconciled against those records on the date of preparation. Where citation-form variants appear in the source documents ("Dark et al. 2011," "Dark et al., 2011," "Dark et. al 2011," "Dark and others 2011," "Dark, S. et al. 2011," "Shana Dark et al.," "Shawna Dark et al.," and similar), each has been classified as a direct citation to SCCWRP Technical Report #671 so long as the surrounding context (accompanying title, report number, year, or subject matter) uniquely identifies that report.

— End of report —